



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,349	09/09/2003	Phillip Lu	MS1-1579US	2125
22801	7590	10/03/2008		
LEE & HAYES PLLC 421 W RIVERSIDE AVENUE SUITE 500 SPOKANE, WA 99201				
EXAMINER				
PAUL, DISLER				
ART UNIT		PAPER NUMBER		
2615				
MAIL DATE		DELIVERY MODE		
10/03/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/658,349

**Applicant(s)**

LU ET AL.

**Examiner**

DISLER PAUL

**Art Unit**

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 September 2008.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-37 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☒ Claim(s) 8-24 is/are allowed.  
6) ☒ Claim(s) 1-7, 25-37 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Amendment*

1. Applicant's Amendment with respect to the feature wherein "progressively analyzing consecutive data sample of the audio file to determine a data sample wherein a threshold is reached and identify effective start and fade-out position" have been considered but are moot in view of the new ground(s) of rejection.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-2, 4-7; 25-34; 36-37 are rejected under 35 U.S.C. 102(e) as being anticipated by Moullos et al. (US 7,189,913 B2).

RE claim 1, Moullos et al. disclose of the method comprising:  
receiving a request to play a first and second audio file and  
progressively analyzing consecutive data samples of the first audio  
file to determined a data sample wherein a threshold is reached to  
identify a first effective start position and fade-out position with  
the first audio file ; and progressively analyzing consecutive data

samples of the second audio file to determine a data sample wherein a threshold is reached to identify a second effective start position associated with the second audio file (fig.2-3,6,8 ; col.4 line 4-20 & line 57-65; col.6 line 10-40; col.11 line 34-46); playing the first audio file beginning at the first effective start position and upon reaching the fade out position associated with the first audio file; fading-out playback of the first audio file; and simultaneously fading-in playback of the second audio file beginning at the second effective position (fig.2-3; col.6 line 10-40; col.7 line 14-30).

Re claim 2, the method as recited in claim 1, with the wherein the fade-out position is located with the inherent predetermined time ahead of an effective end position associated with the first audio file (fig.3; col.5 line 22-29/with inherent of fade out accompany with effective end).

Re claim 4, the method as recited in claim 1 further comprising fading-out playback of the second audio file upon reaching a fade-out position associated with the second audio file (fig.2-3; col.6 line 10-25).

Re claim 5, the method as recited in claim 1 wherein the first effective start position and the fade-out position associated with the first audio file are stored in a media library (fig.8; col.13 line 12-40/to be implemented).

Re claim 6, the method as recited in claim 1 wherein the first effective start position and the fade-out position associated with the first audio file are stored in the first audio file (fig.3/audio file with start and fade-out).

Re claim 7, one or more computer-readable memories containing a computer program that is executable by a processor to perform the method recited in claim 1 (see claim 1 rejection above).

Re claim 25, Moulios et al. disclose of the apparatus comprising: a cross-fade parameter calculator to progressively analyze consecutive data samples of an audio file to determine a data sample wherein a threshold is reached and calculate at least one fade-out parameter associated with the audio file (fig.8, 5-6; col.13 line 12-30); a media library coupled to the cross-fade parameter calculator, the media library to store fade-out parameters associated with a plurality of audio files; wherein the fade-out parameters are stored separate from the audio files; and across-fader coupled to the media library, wherein the cross-fader to apply fade-out parameters during playback of audio files (fig.8 wt (812; 815; 813); fig.2-3)).

Re claims 29-31 have been analyzed and rejected with respect to claims 1-2, 4 respectively.

Re claim 32, the apparatus as recited in claim 29 wherein the start position associated with the first audio file, the fade-out position associated with the first audio file, and the second effective start position associated with the second audio file are retrieved from a media library (fig.8; col.13 line 12-40/to be implemented).

Re claim 33, the apparatus as recited in claim 29 wherein the start position associated with the first audio file and the fade-out position associated with the first audio file are retrieved from the first audio file (fig.3/audio file with start and fade-out).

Re claim 34, Moulios disclose of the or more computer-readable media having stored thereon a computer program that, when executed by one or more processors, causes the one or more processors to perform a method comprising (fig.8): receiving a request to play a sequence of audio files; progressively analyzing consecutive data samples in the sequence of audio files, yielding data to calculate an effective start position and a fade- out position associated with the first audio file; progressively analyzing consecutive data samples of a second audio file in the sequence of audio files, yielding data to calculate an effective start position associate with a second audio file, wherein the second audio file is adjacent and subsequent to the first audio file within the sequence of audio files (fig.2-3,6,8 ; col.4

line 4-20 & line 57-65; col.6 line 10-40; col.11 line 34-46); playing the first audio file beginning at the effective start position associated with the first audio file, upon reaching the fade-out position associated with the first audio file: fading-out playback of the first audio file; and playing the second audio file beginning at the second effective start position associated with the second audio file (fig.2-3; col.6 line 10-40; col.7 line 14-30).

Re claim 36, One or more computer-readable media as recited in claim 34 wherein the one or more processors further fade-out playback of the second audio file upon reaching a fade-out position associated with the second audio file (fig.2-3;5/wt fade-out of audio files).

Re claim 37, One or more computer-readable media as recited in claim 34 wherein the one or more processors further calculate effective start positions and fade-out positions associated with each audio file in the sequence of audio files (fig.3, 5/with start and fade-out respectively).

4. Claims 3, 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moullos et al. (US 7,189,913 B2) in view of Takenaka et al (US 6,807,450).

Re claim 3, the method as recited in claim 1, but Moulios et al. fail to disclose of the specific wherein the first effective start position differs from the start of the first audio file. But, Takenaka et al. disclose of a system wherein the concept of having effective start position differs from the start of the first audio file {(fig.2 wt(ta1,T); col.9 line 17-21)} for purpose of generating continuous natural reproduce sound. Thus, taking the combined teaching of Moulios and Takenaka et al. as a whole, it would have been obvious for one of the ordinary skill in the art to have modified Moulios et al. with the concept of having effective start position differs from the start of the first audio file for purpose of generating continuous natural reproduce sound.

Re claim 35, one or more computer-readable media as recited in claim 34, But, Moulios fail to disclose of the concept wherein the fade-out position associated with the first audio file is calculated by subtracting a predetermined time period from an effective end position associated with the first audio file. But, Takenaka et al. disclose of a system wherein the concept wherein the fade-out position associated with the first audio file is calculated by subtracting a predetermined time period from an effective end position associated with the first audio file (col.8 line 20-33 wt (silent is removed at position ends)) for purpose of generating continuous natural reproduce sound. Thus, taking the combined teaching of Moulios and Takenaka et al. as a whole, it would have been obvious for one of the ordinary skill in the



art to have modified Moulios et al. with the he concept of wherein the fade-out position associated with the first audio file is calculated by subtracting a predetermined time period from an effective end position associated with the first audio file for purpose of generating continuous natural reproduce sound.

5. Claims 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moulios et al. (US 7,189,913 B2).

Re claim 25, Moulios et al. disclose of the apparatus comprising: a cross-fade parameter calculator to progressively analyze consecutive data samples of an audio file to determine a data sample wherein a threshold is reached and calculate at least one fade-out parameter associated with the audio file (fig.8, 5-6; col.13 line 12-30); a media library coupled to the cross-fade parameter calculator, the media library to store fade-out parameters associated with a plurality of audio files; and across-fader coupled to the media library, wherein the cross-fader to apply fade-out parameters during playback of audio files (fig.8 wt (812; 815; 813); fig.2-3)).

While, Moulios et al. disclose of the above with fade-out parameters and audio files (fig.1-2, 5); However, Moulios et al. fail to disclose of the specific wherein the fade out parameters are stored separate from the audio files. However, official notice is taken the concept of having the parameters being stored separately from the audio files is

simply the designer's preference, thus it would have been obvious for one of the ordinary skill in the art to have modify Moulios et al. by incorporating the specific wherein the fade out parameters are stored separate from the audio files for producing natural continuous audio songs.

Re claim 26, the apparatus as recited in claim 25 wherein the cross-fade parameter calculator calculates an effective start position associated with the audio file (fig.2-3, 5/wt effect start).

Re claim 27, the apparatus as recited in claim 25 wherein the cross-fade parameter calculator calculates an effective end position associated with the audio file (fig.3,5).

Re claim 28, the apparatus as recited in claim 25 wherein the cross-fader retrieves fade-out parameters from the media library (see claim 25 rejection explanation).

***Allowable Subject Matter***

1. Claims 8-24 are allowed.

Re claim 8 has been analyzed and allowed since none of the prior art of record disclose of the specific wherein calculating an average value of the first two data samples in the

audio file; if the average value exceeds a threshold value, marking the second data sample as an effective start position associated with the audio file and marking the first data sample as silent; if the average value does not exceed the threshold value and selecting subsequent data samples in the audio file and updating the average value of all selected data samples until the average value exceeds a threshold value and marking a current data sample as an effective start position associated with the audio file; and marking previously selected data samples as silent.

Similarly Re claim 16 has been analyzed and allowed for same reason as in claim 8 above.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Disler Paul whose telephone number is 571-270-1187. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chin Vivian can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Vivian Chin/  
Supervisory Patent Examiner, Art Unit 2615